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EXAMINER

MARINI, MATTHEW G

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/529,271
Filing Date: March 25, 2005
Appellant(s): BRANDENBURG ET AL.

Phillip M. Pippenger
Reg. No. 46,055
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/21/10 appealing from the Office action mailed 12/24/09.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 12-22 are pending in this application.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

EP 1044915	Billet	10-2000
4,361,260	Hanlan	11-1982

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Billet (EP 1044915).

As to Claim 18, Billet teaches in Fig. 1, an apparatus comprising: a controller, 28, connected to a motor, 42, of at least one of the pulling units, 40; and a first cut-register sensor, 54, disposed to detect a first actual value of the cut register, 56, and feed the detected first actual value to the controller, 28, wherein the controller, 28, controls the

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motor, 42, to adjust a speed of said at least one pulling unit, 40, based on the first actual value of the cut register, 56, as read in paragraph 41.

The examiner would like to point out that the limitations recited in the preamble have been treated as intended use. The limitations found in the preamble merely recite the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

As to Claim 19, Billet teaches in Fig. 1, an apparatus further including a second cut-register sensor, 36, connected to the controller, 28, and disposed at a second pulling unit, 20, upstream of said at least one pulling unit, 40, the second cut-register sensor, 36, detecting a second actual value, pulses created by the movement of the web, 16, correlating to the cut register, 56, printed on the web, 16, and feeding the second actual value to the controller, 28, as seen in Fig. 1, the controller, 28, is capable of applying feedforward control based on the second actual value in the equation in paragraph 47, and as read in paragraphs 46 and 47.

As to claim 20, Billet teaches in Fig. 1, the apparatus further including: a computing unit, indirectly taught in paragraph, 41, connected to the controller, 28, the computing unit, calculating an actual state of the cut register based on a mathematical model using a reference table, paragraph, 49, where the mathematic model, uses the

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length of the web in the buffer, Lb; the controller, 28, receiving the calculated actual state from the computing unit and compares it to a calculated count from encoder, 36, and depending on the result of Lb and its comparison, the control, 28, is capable of applying, feedforward control based on the differentiating proportion to correct the cut register of the web, 16, without the need of measuring, cut registers, 56, paragraph, 49.

As to Claim 21, Billet teaches in Fig. 1 the apparatus where in the controller, 28, further connected to a motor, 42, of a second pulling unit, 40, downstream of said at least one pulling unit, 20, and provides to the second pulling unit, 40, a second setpoint value, i.e. pulse, representing a predetermined desired placement for a cut of on the web for controlling a lead of the second pulling unit, 40, paragraph 41, lines 4-15.

As to claim 22, Billet teaches in Fig. 1, the apparatus wherein the controller, 28, is capable of controlling said at least one pulling unit, 40, to compensate for a counteracting effect by forces of the web, 16, on a torque of the motor, 42, of said at least one pulling unit, 40. Because there is no structure further defining how these elements compensated for counteracting forces on the web, the listed elements above of Billet are therefore capable of performing the functional language of the controller.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billet (EP 1 044 915) in view of Hanlan (4,361,260).

As to Claim 12, Billet teaches in Fig. 1 structure capable of performing a method for controlling a cut register, 56, of a web-fed rotary press, 12, the cut register, 56, representing placement of cuts on a web, in between images, Fig. 3, comprising: guiding a web, 16, leaving a last printing press, 12, in which indicia has been printed thereon, to a cross-cutting device, 48, via at least two pulling units, 20 and 40, with adjustable leads, via motors, 22 and 42, wherein the pulling units are independently rotatable from one another and from the cross-cutting device, 48, as seen in Fig. 1; and changing a circumferential speed by controlling the motor, 42, of at least one of the pulling units, 40, to adjust the cut register, paragraphs 38-41.

Billet fails to teach there being no movable tensioning roller between the at least two pulling units.

However, Hanlan teaches in Fig.1 a device in which there is no movable tensioning roller between the at least two pulling units, in which the two pulling units are independently controlled, like that of the pulling units taught in Billet. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Billet by removing the tensioning roller taught in Fig. 1 of Billet so as to resemble the system taught by Hanlan in Fig. 1 because in Col. 14 lines 19-21 Hanlan teaches the

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disclosed invention provides a reliable registration system with simplified structure, i.e. no tensioning roller between pulling stations.

As to Claim 13, Billet teaches in Fig. 1 the method where the step of changing includes: detecting a first ^{1a} actual value of the cut register using a first cut-register sensor, 54; feeding the detected first actual value of the cut register to a controller, 28; comparing, by the controller, 28, the detected actual value of the cut register, from sensor 54, of the cut register, 56, with a cut-register set point value representing a predetermined desired placement of a cut on the web, paragraph 41, lines 4-11; adjusting, by the controller, 28, a motor, 42, of said at least one pulling unit, 40, to change the circumferential speed, paragraph 41.

As to Claim 14, Billet teaches in Fig. 1 the method further including: providing a second cut-register sensor, 36, positioned at a second pulling unit, 20, upstream of said at least one pulling unit, 40; detecting a second actual value of the cut register via pulses created as the web is fed, paragraph 29, using the second cut-register sensor, 36; deriving a differentiating proportion from the first and second actual values of the cut register, using equation seen in paragraph 47; and is capable of applying, by the controller, 28, feedforward control based on the differentiating proportion, paragraphs, 46-47.

As to claim 15, Billet teaches in Fig. 1, the method further including: determining an actual state of the cut register using a reference table based on a mathematical model, paragraph 49, where the mathematic model, discussed in paragraph, 49, uses the length of the web in the buffer; deriving a differentiating proportion from the actual state of the cut register through comparison of a calculated count from encoder, 36; and depending on the result, is capable of applying, by the controller, 28, feedforward control based on the differentiating proportion to correct the cut register of the web, 16, without the need of measuring, cut registers, 56, paragraph, 49.

As to Claim 16, Billet teaches in Fig. 1 the method further including: supplying by the controller, 28, to a second pulling unit, 40, via motor, 42, downstream of said at least one pulling unit, 20, a second setpoint value, i.e. pulse, for controlling a lead of the second pulling unit, 40, paragraph 41, lines 4-15.

As to claim 17, Billet teaches in Fig. 1, the method wherein the controller, 28, is capable of controlling said at least one pulling unit, 40, to compensate for a counteracting effect by forces of the web, 16, on a torque of the motor, 42, of said at least one pulling unit, 40. Because there is no structure further defining how these elements compensated for counteracting forces on the web, the listed elements above of Billet are therefore capable of performing the functional language of the controller.

(10) Response to Argument

In response to appellant's arguments of claim 18, specifically the "limitations" found within the preamble, the examiner would like to point out the limitations found within the body of the claim requiring the "limitations" of the preamble have been treated.

As appellant requested, the examiner has consider the claim without the preamble and has answered the following questions presented by appellant:

What pulling unit? The examiner has pointed to at least one pulling unit, 40, as seen in Fig. 1 of Billet, and as required by the body of the claim.

How many? At least one, as required by the body of the claim.

What are they pulling? The web, as required by the body of the claim.

Where are they? The pulling unit, 40, is part of the apparatus and therefore part of the apparatus. The examiner would like to point out, that the body of the claim does not further limit the location of the pulling unit.

What cut register? The cut register, 56, used to indicate where a cut occurs within the apparatus found on the web, as seen in Fig. 1.

What does it even represent? The cut register, 56, represents, as defined within the body of the claim, a value used to control the speed of the pulling unit, 40.

The preamble, therefore, has not been ignored when the body of the claim has required recited preamble structure for structurally limiting the apparatus.

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In response to appellant's arguments of claim 12, specifically how the combination of Billet in view of Hanlan would be nonobvious, resulting in system failure, the examiner respectfully disagrees.

Billet's roller 26 is a balance roller, used in combinations with the control device 28 to increase and decrease the speed of the web drive roller 38 as read in paragraph [0040] of Billet for controlling a cut registry. The balance roller of Billet does aid in the compensation of web slippage during feeding however is in no way the sole component for successful web feeding.

Hanlan shows a system that simply uses speed control for feeding a web and controlling a cut registry (without a balance/tension roller). Therefore the modification of Billet in view of Hanlan is not a vandalism of Billet, but a modification that results in appellant's present invention by simplifying the taught structure of Billet.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Matthew G Marini/
Examiner, Art Unit 2854

Conferees:

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854

/Justin P. Bettendorf/
RQAS, TC 2800